# **INTERNATIONAL SEARCH REPORT**

PCT/IB2004/052756

A. CLASSI IPC 7	FICATION OF SUBJECT MATTER H03L7/10 H03L7/189								
According to International Patent Classification (IPC) or to both national classification and IPC									
B. FIELDS	SEARCHED								
Minimum do IPC 7	ocumentation searched (classification system followed by classification H03L	on symbols)							
Documental	tion searched other than minimum documentation to the extent that s	uch documents are included in the fields so	earched						
	ata base consulted during the international search (name of data ba	se and, where practical, search terms used	)						
EPO-Internal									
C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the relation	evant passages	Relevant to claim No.						
<b>X</b>	EP 1 193 875 A (ALCATEL) 3 April 2002 (2002-04-03) paragraph '0050! - paragraph '005	57!	1–4						
Х	GB 2 337 382 A (* MOTOROLA LIMITE 17 November 1999 (1999-11-17) page 12, line 25 - page 15, line		1-4						
Х	EP 0 360 442 A (NIPPON TELEGRAPH TELEPHONE CORPORATION) 28 March 1990 (1990-03-28) page 6, line 20 - page 8, line 55	·	1–4						
Х	EP 0 412 491 A (MITSUBISHI DENKI KAISHA) 13 February 1991 (1991-02 column 4, line 9 - column 8, line	?-13)	1-4						
	her documents are listed in the continuation of box C.	X Patent family members are listed in	n annex.						
° Special ca	itegories of cited documents :	"T" later document published after the inte	mational filing date						
"A" docume consid	ent defining the general state of the art which is not lered to be of particular relevance	or priority date and not in conflict with cited to understand the principle or the invention	the application but eory underlying the						
"E" earlier o	document but published on or after the International late	"X" document of particular relevance; the c cannot be considered novel or cannot							
"L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is cited to establish the publication date of another									
"O" document referring to an oral disclosure, use, exhibition or cannot be considered to involve an inventive step when the document is combined with one or more other such docu-									
other r "P" docume later th	ent published prior to the international filing date but	ments, such combination being obviou in the art. "&" document member of the same patent	•						
	actual completion of the international search	Date of mailing of the international sea							
8 March 2005		0 6. 05. 20	05						
Name and n	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer							
	NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo ni,	W I W D							
	Fax: (+31-70) 340-3016	Kahn, K-D							

# INTERNATIONAL SEARCH REPORT

PCT/IB2004/052756

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.:     because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  See annex
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

#### 1. claims: 1-4

Claims 1-4 define a method for interference compensation in a phase-locked loop (PLL). The method includes generating a compensation voltage for known interference events, which compensation voltage is superimposed on the tuning voltage of the frequency generator in the loop. The problem solved is to reduce transient responses of the PLL caused by known interference events such as e.g. channel switching.

### 2. claims: 5 - 11

Claims 5 - 11 define an arrangement for interference compensation in a PLL. The arrangement comprises a voltage-controlled frequency generator, which has a tuning input and a ground terminal. A controllable voltage source is connected to the ground terminal. The problem solved is to define an appropriate input for a controllable voltage source.

## **INTERNATIONAL SEARCH REPORT**

PCT/IB2004/052756

	atent document d in search report		Publication date		Patent family member(s)	Publication date
EP	1193875	A	03-04-2002	EP JP US	1193875 A1 2002185318 A 2002033741 A1	03-04-2002 28-06-2002 21-03-2002
GB	2337382	Α	17-11-1999	NONE		
EP	0360442	A	28-03-1990	JP JP JP JP JP CA DE EP US	2067822 A 2113538 C 8002020 B 2100519 A 2059172 C 2137518 A 7097731 B 1325251 C 68916889 D1 68916889 T2 0360442 A1 4980652 A	07-03-1990 21-11-1996 10-01-1996 12-04-1990 10-06-1996 25-05-1990 18-10-1995 14-12-1993 25-08-1994 16-03-1995 28-03-1990 25-12-1990
EP	0412491	Α	13-02-1991	JP DE DE EP US	3157018 A 69020452 D1 69020452 T2 0412491 A2 5036295 A	05-07-1991 03-08-1995 04-04-1996 13-02-1991 30-07-1991